

Appl. No. 10/069,776
Amendment dated March 26, 2004
Reply to Office Action of October 27, 2003

Amendment to the Claims:

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1 and 2. (canceled).

Claim 3. (currently amended): ~~The integrated sensor device according to claim 1,~~

An integrated sensor device which is constructed into a single integrated circuit device comprising a detection unit that has an organic membrane, characteristics of which are changed through contact with gas or liquid containing substance to be measured, and a converter for converting the change of the characteristics to electric signal; a control unit for processing the signal representing the measurement result from the detection unit; and an antenna unit for transmitting the signal processed by the control unit to outside and for receiving energy necessary for the transmission and operations of the detection and control units from the outside,

wherein the control unit has memory for pre-storing correcting information to correct the measurement result of the detection unit, and in operation the control unit corrects the measurement result in accordance with the correcting information and transmits the corrected measurement result from the antenna unit.

Claim 4. (canceled).

Claim 5. (currently amended): A measuring system comprising:

~~the integrated sensor device according to claim 1~~

an integrated sensor device which is constructed into a single integrated circuit device comprising a detection unit that has an organic membrane, characteristics of which are changed through contact with gas or liquid containing substance to be measured, and a converter for converting the change of the characteristics to electric signal; a control unit for processing the signal

representing the measurement result from the detection unit; and an antenna unit for transmitting the signal processed by the control unit to outside and for receiving energy necessary for the transmission and operations of the detection and control units from the outside;

a container for storing a plurality of the integrated sensor devices;

an actuator for actuating predetermined number of the integrated sensor devices stored in the container to be usable and for removing the deteriorated integrated sensor device;

a controller for controlling operation of the actuator based on decision of whether performance of the integrated sensor device is deteriorated or predetermined time for use terminates; and

an antenna unit for receiving the measurement result transmitted from the integrated sensor device in use and for transmitting energy to be supplied to the integrated sensor device.

Claim 6. (currently amended): A measuring system comprising:

~~the integrated sensor device according to claim 1~~

an integrated sensor device which is constructed into a single integrated circuit device comprising a detection unit that has an organic membrane, characteristics of which are changed through contact with gas or liquid containing substance to be measured, and a converter for converting the change of the characteristics to electric signal; a control unit for processing the signal representing the measurement result from the detection unit; and an antenna unit for transmitting the signal processed by the control unit to outside and for receiving energy necessary for the transmission and operations of the detection and control units from the outside;

a plurality of containers, each of which stores the integrated sensor device one by one;

an actuator for actuating predetermined number of the integrated sensor devices stored in the container to be usable and for removing the deteriorated integrated sensor device;

a controller for controlling operation of the actuator based on decision of whether performance of the integrated sensor device is deteriorated or predetermined time for use terminates; and

an antenna unit for receiving the measurement result transmitted from the integrated sensor device in use and for transmitting energy to be supplied to the integrated sensor device.

Claim 7. (previously presented): The measuring system according to claim 5, wherein the container has a seal to prevent invasion of gas or liquid from outside.

Claim 8. (original): The measuring system according to claim 7, wherein the container has absorbent inside to absorb substance that deteriorates the integrated sensor device.

Claim 9. (currently amended): The measuring system comprising:

~~the integrated sensor device according to claim 1~~

an integrated sensor device which is constructed into a single integrated circuit device comprising a detection unit that has an organic membrane, characteristics of which are changed through contact with gas or liquid containing substance to be measured, and a converter for converting the change of the characteristics to electric signal; a control unit for processing the signal representing the measurement result from the detection unit; and an antenna unit for transmitting the signal processed by the control unit to outside and for receiving energy necessary for the transmission and operations of the detection and control units from the outside;

a plurality of containers, each of which has a lid partly or wholly made by thin membrane, for sealing the integrated sensor device one by one inside together with gas or liquid to maintain the integrated sensor device in stability;

an actuator for actuating predetermined number of the integrated sensor devices stored in the container to be usable and for removing the deteriorated integrated sensor device by opening an aperture in the thin membrane of the container;

a controller for controlling operation of the actuator based on decision of whether performance of the integrated sensor device is deteriorated or predetermined time for use terminates; and

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an antenna unit for receiving the measurement result transmitted from the integrated sensor device in use and for transmitting energy to be supplied to the integrated sensor device.

Claims 10-13. (canceled).

Claim 14. (previously presented) A reading device comprising:

an antenna unit for receiving the measurement result transmitted from the integrated sensor device according to claim 3, and for transmitting energy to be supplied to the integrated sensor device; and

a display unit for displaying information on the measurement result received from the integrated sensor device through the antenna unit.

Claim 15. (canceled).

Claim 16. (previously presented): A measuring system comprising:

the integrated sensor device according to claim 3;

a container for storing a plurality of the integrated sensor devices;

an actuator for actuating predetermined number of the integrated sensor devices stored in the container to be usable and for removing the deteriorated integrated sensor device;

a controller for controlling operation of the actuator based on decision of whether performance of the integrated sensor device is deteriorated or predetermined time for use terminates; and

an antenna unit for receiving the measurement result transmitted from the integrated sensor device in use and for transmitting energy to be supplied to the integrated sensor device.

Claim 17. (canceled).

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Claim 18. (previously presented): A measuring system comprising:
the integrated sensor device according to claim 3;
a plurality of containers, each of which stores the integrated sensor device one by one;
an actuator for actuating predetermined number of the integrated sensor devices stored in the container to be usable and for removing the deteriorated integrated sensor device;
a controller for controlling operation of the actuator based on decision of whether performance of the integrated sensor device is deteriorated or predetermined time for use terminates; and
an antenna unit for receiving the measurement result transmitted from the integrated sensor device in use and for transmitting energy to be supplied to the integrated sensor device.

Claim 19. (previously presented): The measuring system according to claim 6, wherein the container has a seal to prevent invasion of gas or liquid from outside.

Claim 20. (canceled).

Claim 21. (previously presented): The measuring system comprising:
the integrated sensor device according to claim 3;
a plurality of containers, each of which has a lid partly or wholly made by thin membrane, for sealing the integrated sensor device one by one inside together with gas or liquid to maintain the integrated sensor device in stability;
an actuator for actuating predetermined number of the integrated sensor devices stored in the container to be usable and for removing the deteriorated integrated sensor device by opening an aperture in the thin membrane of the container;
a controller for controlling operation of the actuator based on decision of whether performance of the integrated sensor device is deteriorated or predetermined time for use terminates; and

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an antenna unit for receiving the measurement result transmitted from the integrated sensor device in use and for transmitting energy to be supplied to the integrated sensor device.

Claim 22. (canceled).

Claim 23. (previously presented): A container device comprising storage for storing a plurality of the integrated sensor devices according to claim 3, in seal.

Claim 24. (canceled).

Claim 25. (previously presented): A container device comprising storage for storing the integrated sensor device according to claim 3, in seal one by one.